



A CLINICAL STUDY ON PSYCHIATRIC COMORBIDITIES AMONG DIAGNOSED PATIENTS OF POLYCYSTIC OVARY SYNDROME

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ABSTRACT

Background : Polycystic ovary syndrome is one of the emerging endocrinological condition among women of reproductive age. PCOS affect their mental health as well. There are many researches going on PCOS. **Aim of the study :** This study was done with an aim to see the prevalence of psychiatry comorbidities among PCOS patients attending Gynaecology department as well as Psychiatry department of Guwahati medical college and hospital, a tertiary care centre in North eastern area of the country. **Methodology:** This was a hospital based cross sectional observational study done over a period of one year, from April 2021 to May 2022. Sample size was 50. Method of sampling was convenient sampling. Patients attending Gynaecology out patient department and Psychiatry department of Gauhati medical college and hospital diagnosed as a case of PCOS by treating physician were enrolled in the study after getting informed written consent. Psychiatric diagnosis was given based on ICD 10 classification of mental and behavioural disorder. **Result :** The study shows that prevalence of psychiatric disorders in PCOS patients were found to be 48% among which mood disorder were more than anxiety disorder. **Conclusion :** PCOS patients are vulnerable for development of psychiatric problems, so they should always be assessed for psychiatric comorbidities. By knowing the trend of psychiatric illnesses among the patients in a particular geographic area paves the way for future consideration in their management.

KEYWORDS : PCOS, psychiatric comorbidities.**Introduction:**

Many psychiatric conditions are found to be associated as comorbid state in patients with polycystic ovary syndrome. The prevalence of psychiatric comorbidity is found to be higher in PCOS patients as compared to general healthy population in many earlier studies. Even though psychiatric comorbidity is common in PCOS patients, it remains unrecognised and undertreated both in tertiary care centre as well as community-based services. Consequences of unrecognised untreated psychiatric disorders have negative impact on patient's mental health, quality of life and their wellbeing as a whole.

Researches are lacking on psychiatric comorbidity among PCOS patients in this part of India. Keeping all these in mind, this hospital-based study was done in Gauhati Medical College and Hospital, Guwahati which provides tertiary care for the population of Assam in particular and the entire North-East India in general.

Aim of the study: To see the prevalence of psychiatric comorbidities among diagnosed patients of polycystic ovary syndrome attending Gynaecology department as well as Psychiatry department of Gauhati Medical College and Hospital.

Materials and Method: The study has been conducted in the Department of Psychiatry and Department of Gynecology, Gauhati Medical College and Hospital. This is a tertiary care hospital located in the capital city of Assam situated in the north-eastern part of the country. It is a Post Graduate Training Institute and also offers consultation liaison services.

The study was approved by Institutional Ethics Committee of Gauhati Medical College and Hospital. This is a hospital based, descriptive and observational study. The study was done over a period of 1 year from May 2021 April 2022. Sample size was 50 and method of sampling was convenience sampling.

Inclusion criteria:

1. Age group of 15-45 years
2. Patients attending Gynecology and Psychiatry department who were diagnosed with PCOS.
3. Patients giving consent.

Exclusion criteria:

1. Uncooperative patients.
2. Intellectually disabled patients.
3. Pregnant patients.
4. Patients already on psychotropics.
5. Patients with significant comorbid medical or surgical illness.

informants/guardians before enrolling them in the study.

Tools used:

1. A structured proforma was prepared for sociodemographic and clinical data of patients
2. The ICD-10 classification of mental and behavioral disorders: clinical descriptions and diagnostic guidelines.

Ethical clearance was obtained from ethical committee, Gauhati Medical College and Hospital, Guwahati.

Patients attending Gynecology out patient department and Psychiatry department, Gauhati medical college and hospital fulfilling the selection criteria were enrolled for the study after obtaining informed written consent.

All patients included in the study population interviewed, thorough history taking and detailed clinical examination was done.

Methodology:

Ethical clearance was obtained from the ethical committee, Gauhati Medical College and Hospital, Guwahati, Assam. Patients attending Gynecology outpatient and Psychiatry department, Gauhati Medical College and Hospital fulfilling the selection criteria were enrolled for the study after obtaining informed written consent. All patients included in the study population interviewed, through history taking and detailed mental status examination was done and those fulfilling the diagnostic criteria according to ICD-10 mental and behavioural disorder were diagnosed with comorbid psychiatric illness.

Results:**Sociodemographic profile of the patients:**

Out of 50 patients 21 patients (42%) were within the age group of 15-20 years whereas 19 (38%) were within 25-30 years, 4 (8%) were within 35-40 years of age, 3 (6%) were within 20-25 years and 30-35 years of age respectively. 28 (56%) were un-married while 15 (30%) were married, 4 (8%) were separated and 3 (6%) were widow. Majority of the patients 30 (60%) were from urban area whereas 20 (40%) were from rural area. Among them 36 (72%) were Hindu while 14 (28%) were Islam by religion. Majority of the patients i.e. 21 (42%) were educated up-to the level of higher secondary, while 20 (40%) were graduate, 2 (4%) were educated up-to primary level, 3 (6%) were up-to middle school and high school respectively. Majority of the patients 27 (54%) are from nuclear family whereas 23 (46%) were from joint family. Among the patients, 32 (64%) were unemployed, while 18 (32%) were employed.

Written and informed consent was taken from the patients and

Table 1: Sociodemographic profile of the patients

Variables	Frequency	Percent
1. Age (Years)		
15-20	21	42
20-25	3	6
25-30	19	38
30-35	3	6
35-40	4	8
2. Marital status		
Married	15	30
Unmarried	28	56
Separated	4	8
Widowed	3	6
3. Locality		
Urban	30	60
Rural	20	40
4. Education status		
Primary school	2	4
Middle school	3	6
High school	3	6
Higher secondary	21	42
Graduate	20	40
Post graduate	1	2
5. Family type		
Nuclear	27	54
Joint	23	46
6. Occupation		
Employed	18	36
Unemployed	32	64

Prevalence of psychiatric comorbidities:

About 24 (48%) patients were having comorbid psychiatric illness i.e. prevalence of psychiatric illness among the patients were 48%.

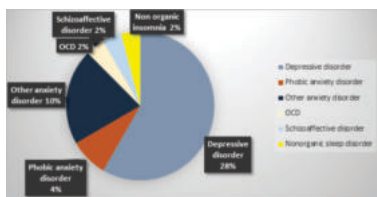
Table 2: Prevalence of psychiatric comorbidity

Comorbid psychiatric illness	Frequency	Percent
Yes	24	48
No	26	52

Distribution of psychiatric illness depicted in figure 1

Out of 24 patients 14 (28%) were having depressive disorder, 5 (10%) patients were having other anxiety disorder, 2 (4%) were having phobic anxiety disorder, 1(2%) was having schizoaffective disorder, another 1 (2%) was having obsessive-compulsive disorder and other 1 (2%) was having nonorganic sleep disorder.

Fig 1: Distribution of patients with psychiatric diagnosis as per ICD-10



DISCUSSION:

In our study it was noted that psychiatric comorbidity was present in 48% of patients while rest 52% had no comorbid psychiatric illness. Similar findings have been noted by Annagur et al in which psychiatric comorbidity in PCOS patients was found to be 50%. Hussain et al found that 52.7% patients of PCOS had psychiatric comorbidity. While Rassi et al found the prevalence as 57%.

In our study 28% were having depressive disorder, 10% patients were having other anxiety disorder among them 8% were having generalized anxiety disorder and 2% were having panic disorder, 4% were having phobic anxiety disorder (social phobia), 2% was having schizoaffective disorder, 2% was having obsessive-compulsive disorder and rest 2% was having nonorganic insomnia. Hussain et al in their study found that 23.64% of PCOS patients had major depressive disorder, 15.45% of PCOS patients had generalized anxiety disorder, 6.36% had obsessive-compulsive disorder, 15.45% patients had panic disorder.

Majority of studies on psychiatric comorbidities most commonly observed depression and anxiety symptoms only. Annagur et al found

the most common psychiatric disorder was major depression (33%), followed by generalized anxiety disorder (13.6%). Rassi et al (2010) observed depression in 26% patients whereas Hollinrake et al (2007) found 21% of PCOS patients were having depression. Chaudhary et al found prevalence of anxiety and depression as 38.6% and 25.7%. While Almeshari et al found prevalence of anxiety and depression as 48% and 49% respectively.

The study findings cannot be generalized to the population as this was done on hospital setting with small sample size. Family history of psychiatric illness may also be a factor influencing the study findings which was not seen in the study. Lastly, the study did not look into the severity of hormonal imbalance and its relation with prevalence of psychiatric illnesses.

CONCLUSION:

Knowledge of psychiatric comorbidity is very much essential among the primary care physicians of PCOS i.e. gynaecologists so as to provide these patients a holistic mode of treatment. Holistic or consultation liaison approach seems beneficial for the treatment of patients with PCOS suffering from psychiatric illness.

Furthermore, it is very important to avoid medications which may have detrimental effect on PCOS symptomatology while treating them for psychiatric problems as there is increased risk of PCOS among the patients who are on certain psychotropic medication for a long period. This bidirectional relationship may need to be understood by both psychiatrists and gynaecologists while treating a female patient of reproductive age either for PCOS or for any psychiatric morbidity to offer them whole recovery and a good quality of life.

Conflict of interest: None

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